

SURVEY PLAN

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Date: _____

This form is provided to the user/sponsor for assistance in determining the vessel requirements for the project. Close attention to detail is essential to the success of the project. So please, please complete the form as accurately as possible. Draw a single line through any item that does not apply. Do not include any information which is or may be deemed classified. Additional information may be provided on the last page.

1.0 GENERAL

Project Title: _____ Survey Title: _____
GUARDIAN Requested by: _____ Organization: _____
Project/Work Assignment Manager: _____ Organization: _____
Survey Chief Scientist: _____ Organization: _____
Organization Address: _____

Phone No.: _____ Fax No.: _____ EPA Grant/Contact: _____ Work Assignment No.: _____
Principal Investigator: _____ Organization: _____
P.I. Telephone No.: _____ FAX No.: _____
Comments: _____

2.0 SCHEDULE OF OPERATIONS

FUNCTION	DATE	TIME	LOCATION	FUNCTION	DATE	TIME	LOCATION
Commence Mobilization	_____	_____	_____	Complete Mobilization	_____	_____	_____
Pre-sail Conference	_____	_____	_____	Dock Trials	_____	_____	_____
Depart Home Base	_____	_____	_____	Arrive on Station	_____	_____	_____
Depart Station	_____	_____	_____	Arrive Home Base	_____	_____	_____
Start Demobilization	_____	_____	_____	Finish Demobilization	_____	_____	_____
Post-sail Conference	_____	_____	_____				
Allowable Weather/Breakdown Days			_____	Maximum Duration (Days)			_____

Comments: _____

3.0 CHEMICAL BACKGROUND INFORMATION (Including standards, spikes, and instrument calibration chemicals). **NOTICE:** A MATERIAL SAFETY DATA SHEET (MSDS) MUST ACCOMPANY EVERY CHEMICAL OR REAGENT THAT IS BROUGHT ABOARD THE LAKE GUARDIAN. COMPLIANCE WITH THIS REQUEST IS ABSOLUTELY NECESSARY PRIOR TO THE SHIP'S DEPARTURE. ADDITIONALLY, CHEMICAL WASTES GENERATED BY SHIP'S USERS MUST BE REMOVED BY USERS. THE USER IS RESPONSIBLE FOR PROVIDING PROVISIONS FOR PROPER WASTE STORAGE METHODS/CONTAINERS

CHEMICAL NAME	QUANTITY	CONCENTRATION
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

4.0 SURVEY JUSTIFICATION AND RATIONALE

5.0 OBJECTIVES

Project: _____

Survey: _____

6.0 ENVIRONMENTAL MANAGEMENT QUESTIONS ASKED BY PROJECT/SURVEY

7.0 SURVEY LOCATION AND DESCRIPTION (Attach Detail/Figures If Needed)

Survey Area(s) Name(s) or Geographic

Name: _____

Survey Area Locations (Provide Map): _____

Survey Area Boundary Coordinates (Lat/Long): _____

Survey Station Types (Water/Sediment): _____

Number of Stations By Type: _____

Water Depth Required: _____ Sediment Zone Required: _____

Survey Transect Lengths: _____ Transect Line Spacings: _____

Other: _____

8.0 SURVEY/SAMPLING METHODOLOGIES (Attach Detail/Tables/Figures If Needed)

Method Descriptions: _____

Method Rationale: _____

Diving On Survey: YES: ____ NO: ____ (If yes, see Section 15 and 16)

9.0 SEQUENCE OF SURVEY TASKS/EVENTS

10.0 SURVEY COMMUNICATIONS REQUIREMENTS

1. HF	_____	FREQ	_____
2. VHF	_____	FREQ	_____
3. UHF	_____	FREQ	_____
4. LORAN-C	_____	5. RADAR	_____
6. GYROCOMPASS	_____	7. SATNAV	_____
8. OMEGA	_____	9. DECCA	_____
10. OTHER COMMUNICATION	_____	11. OTHER NAVIGATION	_____

11.0 SHIPBOARD SERVICES EQUIPMENT SUPPLIES

1. HANDLING EQUIPMENT

PROJECT SUPPLIED _____ GUARDIAN SUPPLIED (Attach GUARDIAN Check List If Appropriate): _____

2. LABORATORIES REQUIRED

PROJECT SUPPLIED _____ GUARDIAN SUPPLIED (Attach GUARDIAN Check List If Appropriate): _____

3. DIRECT DECK ACCESS _____

4. WINCH REQUIREMENTS

PROJECT SUPPLIED _____ GUARDIAN SUPPLIED (Attach GUARDIAN Check List If Appropriate): _____

5. LIFTING GEAR

PROJECT SUPPLIED _____ GUARDIAN SUPPLIED (Attach GUARDIAN Check List If Appropriate): _____

6. OTHER DECK EQUIPMENT: _____

7. ELECTRICAL POWER REQUIREMENTS

Description and Location: _____

8. WATER REQUIREMENTS

Fresh	Quality	Distilled	Quantity
-------	---------	-----------	----------

9. HYDRAULICS

Pressure	Volume
----------	--------

10. AIR

Pressure	Volume
----------	--------

11. SMALL CRAFT

PROJECT SUPPLIED _____ GUARDIAN SUPPLIED (Attach GUARDIAN Check List If Appropriate): _____

IF PROJECT SUPPLIED, PROVIDE

Size _____ Weight _____ O.B. Motor _____

Purpose _____

Will the Guardian need to carry the small craft? YES _____ NO _____

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11.0 SHIPBOARD SERVICES EQUIPMENT SUPPLIES (Continued)

12. CREW ASSISTANCE - The crew of the Lake Guardian includes a Science Officer and Marine Technician who are responsible for operating the ship's science, sampling and laboratory equipment to facilitate your survey goals. There are also several professional seamen on board to handle the deck gear (cranes, winches, A-frames, davits, etc...) for your use. Beyond this scope however, it is requested that your scientific party include the appropriate number of personnel to complete the remainder of your project requirements.

Rating (Type) _____ Number of Personnel _____

Rating (Type) _____ Number of Personnel _____

Rating (Type) _____ Number of Personnel _____

13. OTHER SHIP REQUIREMENTS:

1. _____

2. _____

14. SHORE SUPPORT MOBILIZATION FORCE:

Welders _____ Riggers _____

Mechanics _____ Machinists _____

Laborers _____

12.0 OPERATING

Sea State: Wave Height MAX _____ MIN _____

Atmospheric Conditions:

Wind Speed MAX _____ MIN _____ Direction _____

Temperature MAX _____ MIN _____

Cloud Cover ANY _____ O'CAST _____ SUN _____

Precipitation Permitted _____ Not Permitted _____

Visibility MAX _____ MIN _____

Time of Day ANY _____ DAYLIGHT _____ NIGHT _____

13.0 SCIENTIFIC PARTY

1. Point of Contact _____

2. Number of Personnel _____ Maximum Number of Persons to a Cabin _____

NAME	SURVEY RESPONSIBILITY	ORGANIZATION	TIME/PLACE OF ARRIVAL AND DEPARTURE
1) _____	_____	_____	_____
2) _____	_____	_____	_____
3) _____	_____	_____	_____
4) _____	_____	_____	_____
5) _____	_____	_____	_____
6) _____	_____	_____	_____
7) _____	_____	_____	_____
8) _____	_____	_____	_____
9) _____	_____	_____	_____
10) _____	_____	_____	_____

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Please indicate below if any persons in your science party have taken any courses or obtained training and/or certification in:

- | | |
|---------------------------------|-----------------------------|
| A. Laboratory Health & Safety | B. Field Health & Safety |
| C. Hazardous Materials Handling | D. Emergency Spill Response |
| E. Respiratory Protection | F. Radiation Safety |
| G. First Aid and/or CPR | H. Fire Fighting |
| I. Small Boat Handling | J. Lockout/Tagout |
| K. Crane/Derrick Operation | L. Bloodborne Pathogens |

NAME	TRAINING, COURSE OR CERTIFICATION OBTAINED	OBTAINED WHEN
1) _____	_____	_____
2) _____	_____	_____
3) _____	_____	_____
4) _____	_____	_____
5) _____	_____	_____
6) _____	_____	_____
7) _____	_____	_____
8) _____	_____	_____
9) _____	_____	_____
10) _____	_____	_____

COMMENTS: _____

14.0 PROPOSED REPORTING REQUIREMENTS

12. CREW ASSISTANCE

Debriefing Telephone Call: **YES** **NO** **No. Of Days After Demob.:** _____
Survey Report Due Date (20 Days After Demob.): _____
Final Report/Other Document Description: _____
Other Comments: _____

15.0 DIVING OPERATIONS

Locations: _____
Potential Hazards: _____
Depth Range: _____ Maximum Depth: _____

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Dive Master:	_____	Organization:	_____
Dive #2:	_____	Organization:	_____
Dive #3:	_____	Organization:	_____
Dive #4:	_____	Organization:	_____
Dive #5:	_____	Organization:	_____
Dive #6:	_____	Organization:	_____
Dive #7:	_____	Organization:	_____
Dive #8:	_____	Organization:	_____
Dives' Tasks:	_____		

REQUIREMENTS REMINDER:

OXYGEN WILL BE ON SITE ON BOTH THE GUARDIAN AND TENDER BOAT.

(Oxygen Will Be Provided By The GUARDIAN.)

STANDBY DIVER WILL BE SUITED UP IN THE TENDER BOAT READY TO DIVE.

(Dive Team Scheduling And Bottom Time Planning Must Allow For This.)

GUARDIAN Anchored: **YES:** ____ **NO:** ____ Tender Boat Anchored: **YES:** ____ **NO:** ____

Communications: _____

Tender Boat: _____

Special Equipment Needed: _____

Other: _____

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16.0 DIVER EMERGENCY AID LIST

DIVERS ALERT NETWORK (DAN)

24-Hour Telephone No.:

(919) 684-8111

NEAREST DECOMPRESSION CHAMBER (Facility Name And Address): _____

Telephone No.: _____

24-Hour Telephone No.: _____

Telephone Call On Day Of Initial Diving Operations To Be Made By: _____

Hyperbaric Physician(s): _____

Telephone No.: _____

NEAREST HOSPITAL (Facility Name And Address): _____

Telephone No.: _____

24-Hour Telephone No.: _____

Hyperbaric Physician(s): _____

Telephone No.: _____

NEAREST COAST GUARD STATION (Facility Name And Address): _____

VHF Channel: _____

Telephone No.: _____

FIRST AID EQUIPMENT: _____

Location: _____

Oxygen Location: _____

DIVER MEDIC (Name If Planned): _____

SPECIAL CONSIDERATIONS: _____
